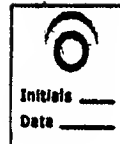


Department of Environmental Protection



Jeb Bush
Governor

Southeast District
P.O. Box 15425
West Palm Beach, Florida 33416

David B. Struhs
Secretary

MAY 30 2002

BUREAU OF WASTE CLEANUP

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JUN 11 2002

TECHNICAL REVIEW SECTION

Edna and Plato Cox
3450 NW North River Drive
Miami, FL 33142

RE: Preliminary Assessment (PA) for Former Pure Lead Products (FPLP)
3450 NW North River Drive, Miami, Dade County, Florida
EPA ID No: FLN000407409

Dear Mr. and Mrs. Cox:

Attached is a copy of the Preliminary Assessment (PA) report that was prepared by the Department's Bureau of Waste Clean-up for the U.S. Environmental Protection Agency (USEPA). Based on the information supplied in the above-mentioned report, it is necessary for you to initiate and complete the site assessment in accordance with the document "Corrective Action for Contamination Site Cases" (copy attached). It is also necessary to execute the Consent Order between you and the Department (FDEP) to seek your commitment for the cleanup of the site in question.

Please respond in writing within fifteen (15) days from your receipt of this letter indicating your intentions in this matter. If you have any questions, require further clarification and to schedule a meeting, please contact Ms. Neha Pandya, E.I. of the Waste Cleanup Section at 561/681-6726.

Thank you for your cooperation in this matter.

Sincerely,

Paul Alan Wierzbicki, P.G.
Waste Cleanup Supervisor

njp

Attachments: Copy of the Preliminary Assessment Report
Copy of the "Corrective Actions for Contaminated Site Cases"

cc: Miami-Dade Department of Environmental Resources Management (DERM) (w/)
Teresa Kinner, DEP/TAL/WCU (w/o) MS 4505
West Palm Beach DEP files

WCU# 011226

"More Protection, Less Process"

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Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
May 6, 2002

David B. Struhs
Secretary

U.S. Environmental Protection Agency
Region IV
AFC Tower Building
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
Attention: Ms. Barbara Dick
Florida Project Manager

BUREAU OF WASTE CLEANUP

JUN 11 2002

TECHNICAL REVIEW SECTION

SUBJECT: Former Pure Lead Products site, Miami, Dade County, Florida-Preliminary Assessment EPA ID No: FLN000407409

Dear Barbara:

Enclosed are copies of the Preliminary Assessment (PA), Site Inspection Worksheets (draft HRS score) and reference package for the Former Pure Lead Products site located in Miami. A brief summary of the evaluation follows.

The Former Pure Lead Products, Inc site (FPLP) site is located at 3450 NW North River Drive, Miami, Dade County, Florida. Based on a review of historical city directories, the FPLP facility started operations no later than 1944 and closed no earlier than 1969. Based on a recent FDEP windshield survey and Miami-Dade County Property Appraiser information, the Zila Shipping Cargo Service Company now occupies the FPLP site. The file information indicates that the FPLP operation consisted of a general office and plant. FPLP reportedly conducted a secondary lead smelting operation, which produced sheet lead, solders, caulking lead, lead pipe and fishing sinkers. Site file information indicates that FPLP used batteries as a primary feedstock for lead. FPLP also reportedly bought scrap lead for processing.

The typical secondary smelting process involved lead scrap and lead components from used car batteries. The lead posts and grids were recovered from the batteries for smelting. The smelter operation typically consisted of reverberatory or blast furnaces, which were used to produce soft pure lead or specialty alloys. As part of the refining process, some smelting operations introduced antimony, arsenic and cadmium for the desired product. The furnaces were periodically opened to remove slag (60-70% lead) and a soft pure lead product. Studies at other former secondary lead smelting sites indicate that lead concentrations in surface soils may exceed 1% near the smelters. A study of soils at eight former secondary smelting facilities in Baltimore and Philadelphia indicated lead concentrations ranging from 306 mg/kg to 2,550 mg/kg. However, no groundwater or soil samples have been collected for analysis at the FPLP site. EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) have identified

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lead as the leading priority contaminant at Superfund sites. Both EPA and ATSDR consider lead a serious public health problem, particularly in children.

Elevated levels of heavy metals, in particular lead, may be present in percentage concentrations in site soils. If so, lead contamination to the surficial aquifer system is likely. The surficial aquifer system, which includes the Biscayne aquifer, is the primary source of drinking water in Dade County. A number of public drinking water wells (MDWSA Hialeah/Preston WTP wellfields) are located in the site area. Based on these facts, the groundwater migration pathway is the primary pathway of concern at this site.

The Miami Canal is in close proximity to the site. Based on previous investigations of secondary lead smelting sites, percentage concentrations of lead may be present in site soils. Therefore, lead may be present in the waters and sediments of the Miami Canal via surface water runoff and/or groundwater discharge. Given the number of fisheries and sensitive environments present in the downstream water bodies (Miami River and Biscayne Bay), further evaluation of this pathway is warranted.

No residents or terrestrial sensitive environments exist on-site. Therefore, the soil exposure pathway is not a concern at this time. A large population and a number of sensitive environments exist within 4 miles of the site. However, no air releases have been reported to date. Therefore, the air migration pathway does not appear to be major concern at this time.

Based on past activities at this site, the likely presence of contaminated soil and groundwater and the proximity of the site to public drinking water wells, further CERCLA action is warranted at this site. Therefore a Site Inspection (SI) is recommended for this site.

Please call me if you need any additional information (850) 487-0506. Thankyou.

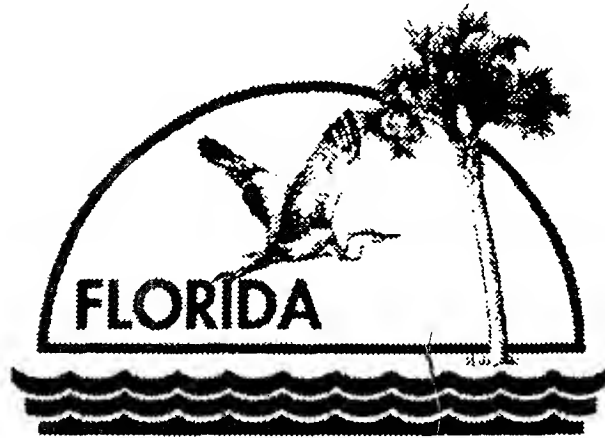
Sincerely,



A. James McCarthy Jr., P.G.
Professional Geologist I
Bureau of Waste Cleanup
Site Screening Superfund Subsection
enclosure
CC: (w/o enclosure)
Paul Wierzbicki, FDEP-West Palm Beach
Reading File
C:\EPA\LETTER2.DOC

**PRELIMINARY ASSESSMENT
FORMER PURE LEAD PRODUCTS, INC.
DADE COUNTY, FLORIDA**

EPA ID No: FLN000407409



Prepared By:

**Florida Department of Environmental Protection
Division of Waste Management
Bureau of Waste Clean-up
Technical Review Section
Site Screening Superfund Subsection**

**A. James McCarthy Jr., P.G
Professional Geologist 1
May 2, 2002**

Date: 05/02/02

Prepared by:

A. James McCarthy Jr., P.G.
FDEP

Site:

Former Pure Lead Products, Inc.
3450 NW South River Drive
Miami, Dade County, Florida

EPA ID No: FLN000407409

1.0 Introduction

Under the authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Re-authorization Act of 1986 (SARA), the Florida Department of Environmental Protection (FDEP), Division of Waste Management, Site Screening Superfund Subsection conducted a Preliminary Assessment (PA) for the Former Pure Lead Products, Inc. site in Miami, Dade County, Florida. The purpose of this investigation was to assess the threat posed to human health and the environment, and to determine the need for additional investigation under CERCLA/SARA or other action. The scope of the investigation included review of available file information and a comprehensive target survey.

2.0 Site Background

2.1 Location

The Former Pure Lead Products, Inc. (FPLP) site is located at 3450 NW North River Drive, Miami, Dade County, Florida. The approximate latitudinal and longitudinal coordinates of the site are 25° 48' 11" N and 80° 15' 12" W, respectively. The site is also defined as being located in the NW 1/4 of Section 28, Township 53S, Range 41E. From US 441 South take a right (head west) on NW 20th Street. Go to NW North River Drive and take a right (head northwest). The site is located on NW North River Drive, near the NW 29th Street intersection. [1,35,38,40,41] (Figures 1,2).

2.2 Site Description

Based on a recent FDEP windshield survey and Miami-Dade County Property Appraiser information, Zila Shipping Cargo Service Company now occupies the FPLP site. The property is approximately 12,525 square feet in size. One building, consisting of 2,400 square feet, is present on-site. This building was reportedly built in 1939. A fence currently restricts site access. A rail line and the Miami Canal (Canal C-6) are

located southwest of the site. The majority of the immediate site area is industrial and commercial property. The nearest school, a public school, is located approximately 0.7 mile west of the site [1,35,41] (Figures 1,2).

2.3 Local Climate

Dade County has a subtropical humid climate. The average annual temperature (Homestead) is 73.9^o F with the average monthly temperature ranging from 66.5^o F in January to 80.9^o F in August. These values are based on 44 years of record. The average annual rainfall for Dade County (Homestead) is 62.60 inches. This annual rainfall figure is also based on 44 years of data. The wettest period of the year is from May to October. Rainfall during these months is associated with convective thunderstorms [9,23]. Hurricane type storms emanating from the tropics during August to November may significantly contribute to the annual rainfall totals. The local net annual rainfall and the 2-yr./24-hr rainfall are approximately 7 inches and 6 inches, respectively [7,8].

3.0 Site History

3.1 Operational History and Waste Characteristics-General Process

The typical secondary smelting process involved lead scrap and lead components from used car batteries. The lead posts and grids were recovered from the batteries for smelting. The smelter operation typically consisted of reverberatory or blast furnaces, which were used to produce soft pure lead or specialty alloys. As part of the refining process, some smelting operations introduced antimony, arsenic and cadmium for the desired product. The furnaces were periodically opened to remove slag (60-70% lead) and a soft pure lead product [36,39,44].

Several public health organizations and EPA have identified a number of companies that conducted secondary lead smelting in the United States. This smelting process utilized the recovery of lead metal and alloys from various forms of scarp including lead acid batteries. The FPLP site was one of those companies identified in the studies. It has been determined that lead concentrations in surface soils may exceed 1% near the smelters. A study of soils at eight former secondary smelting facilities in Baltimore and Philadelphia indicated lead concentrations ranging from 306 milligrams per kilogram [mg/kg] to 2,550 mg/kg. EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) have identified lead as the leading priority contaminant at Superfund sites. Both EPA and ATSDR consider lead a serious public health problem, particularly in children [37,39,40,42].

3.2 Operational History and Waste Characteristics-Specific Site Process

Very little site specific information exists regarding the FPLP site. Based on a review of historical city directories, the FPLP facility started operations no later than 1944 and closed no earlier than 1969. No record of this company was found in the 1973 directory. Based on State of Florida corporate records, the FPLP operation may have started as early as 1935. The file information indicates that the FPLP operation consisted of a general office and plant. The corporate office was reportedly located nearby at the intersection of NW 30th Street and NW 32nd Avenue. FPLP reportedly produced sheet lead, solders, caulking lead, lead pipe and fishing sinkers. Site file information indicates that FPLP used batteries as a primary feedstock for lead. However, FPLP also reportedly bought scrap lead for processing. [34,38,40,41].

3.3 Site Ownership

A review of the State of Florida Division of Corporate records indicates that J.D Howard Jr. formerly owned the Pure Lead Products Company. Based on Miami-Dade County Property Appraiser information, the site is now owned by Edna and Plato Cox of Miami, Florida. The current property owner reportedly purchased the FPLP property in October 1972 [39,41].

3.4 Regulatory/Permitting History

Neither the Miami-Dade County Environmental Resources Management (MDERM) nor FDEP have any file information regarding this site [34].

In late 2001, EPA referred five secondary lead smelting sites, including the FPLP site, to the FDEP for prescreening. FDEP completed a Pre-CERCLIS Screening Assessment Checklist/Decision report on November 5, 2001. The report identified the site location, described potential lead problems possibly associated with the site and identified potential receptors. Based on the findings of the report, the site was recommended for entry onto CERCLIS. EPA subsequently reviewed the report and entered the site onto the CERCLIS database [33,34,36].

On December 9, 2001, FDEP completed a Windshield Survey of the FPLP site. The survey pinpointed the site location and noted that the site was active and occupied by a shipping/cargo company [35,43].

3.5 Sampling and Analysis

Based on a review of the site file, it does not appear that any sampling activities have taken place at this site [34].

4.0 Ground-Water Pathway

4.1 Hydrogeologic Setting

This site is situated on the western edge of the Atlantic Coastal Ridge geomorphologic feature which is within the Southern (or Distal) Geomorphologic Province of Florida. No karst terrain features exist (i.e. sinkholes) within the site area. Three major hydrogeologic units are present in Dade County. These units include the surficial aquifer system, intermediate aquifer system/confining unit and the Floridan aquifer system [1,10,11,12,13,15,16].

The principal source of freshwater in Dade County is the surficial aquifer system. The Biscayne aquifer is the most productive unit of this system. The surficial aquifer system is composed of upper Cenozoic sediments that are hydraulically connected. The surficial aquifer system includes, in ascending order, the Tamiami Formation (Fm), Caloosahatchee Fm, Fort Thompson Fm, Key Largo Limestone, Anastasia Fm, Miami Limestone and the Pamlico Sand (undifferentiated Pleistocene-Holocene sediments). The surficial aquifer system exists under water-table conditions and is found generally within 5 feet of land surface. It is commonly overlain by a thin veneer of peat, muck (a mixture of silt and very fine-grained decomposed organic matter) or sand. The surficial aquifer system is composed of limestone, sandstone, sand, shell, lime mud, silt, clay, claystone, siltstone and an admixture of these materials. The surficial aquifer system ranges in thickness from 140 feet (southeast Dade County) to more than 280 feet (northeast Dade County) in eastern Dade County. The primary source of recharge for the surficial aquifer system is local rainfall. During periods of low rainfall, the extensive canal system in Dade County provides a significant source of recharge. Discharge from the aquifer occurs by pumping and ground water flow into Biscayne Bay, the Atlantic Ocean and canals during the wet season. The regional ground water flow in Dade County is generally east or southeast towards the Atlantic Ocean. However, the presence of active well fields, surface water control canals and tidal fluctuations commonly cause local deviations in the regional flow pattern. The average transmissibility of the Biscayne aquifer unit ranges from 3 to 5 million gallons /day/foot. Well yields (6 inch wells) range from 1,000 to 1,500 gallons per minute. Water from this aquifer is generally colored either with organic material or iron in the upper part of the aquifer. Excessive amounts of iron are encountered in some parts of the aquifer. [1,9,11,13,14,15,16,17,23,26].

The intermediate aquifer system/confining unit consists of the relatively impermeable marl; greenish-gray, sandy clay and silt units located in the lower part of the Tamiami Fm (Pliocene age) and Hawthorn Group (Arcadia and Peace River Fms-Miocene age). The Hawthorn Group is found approximately 150 feet below land surface (bls) and is around 750 feet thick in the site area. Well sorted, medium grained sands interbedded with claystones or siltstones yield low to moderate quantities of water. This intermediate confining unit underlies the surficial aquifer system to a depth 975 feet in eastern Dade County and forms the upper confining unit for the Floridan aquifer system [1,11,12,13,15].

The artesian Floridan aquifer system is composed of carbonate and evaporite units ranging from Eocene to Oligocene age. The Floridan aquifer system consists of, in ascending order, the Oldsmar Fm, Avon Park Fm, Ocala Limestone and the Suwannee Limestone. The top of the Floridan aquifer system is found approximately 1,000 feet bls and the aquifer is about 2,600 feet thick in northeastern Dade County. Water from the Floridan aquifer system is highly mineralized and is currently unsuitable for potable water supplies in Dade County [11,15].

4.2 Ground-Water Targets

The majority of the site area, including the Cities of Hialeah and Miami, is supplied water by the Miami-Dade Water and Sewer Authority (MDWSA) water system. The MDWSA maintains three regional water treatment plant (WTP) facilities in Dade County. The Hialeah and John E. Preston WTPs serve northern Dade County north of Flagler Street. While the Alexander Orr, Jr. WTP serves Dade County south of Flagler Street to S.W. 248th Street. The Hialeah/Preston and Alexander Orr Jr. systems each serve approximately 1 million people. However, the two systems are interconnected allowing water to be exchanged during periods of peak demand [1,21,22,24].

The Hialeah and Preston WTPs share a common distribution system and provide drinking water to large portions of northern Dade County. Water for this system is provided by wellfields open to the Biscayne aquifer. The Hialeah and Preston WTPs, which are located adjacent to each other, are provided raw water from the Northwest (15 wells), Hialeah/Preston (8 wells) and Miami Springs [Upper & Lower] (20 wells) wellfields. These wellfields have depths ranging from 80 to 115 feet and are cased to depths of 46 to 80 feet. The pumping capacities of the wells range from 2,500 gallons per minute (gpm) to 7,600 gpm. The contributions from the Miami Springs/Hialeah wellfields and Northwest wellfield are 70 million gallons per day (MGD) and 100 MGD, respectively. The Hialeah/Preston wellfield is situated between 2.7 and 3 miles northwest of the site. The Miami Springs-Upper wellfield is located between 2.9 and 3.9 miles northwest of the site while the Miami Springs-Lower wellfield is located between 2.3 and 2.8 miles west-northwest of the site. The Northwest Wellfield is located approximately 10.5 miles west of the site [1,21,22,24].

The Alexander Orr, Jr. WTP is supplied raw water by the Alexander Orr (10 Biscayne aquifer wells), Snapper Creek (4 Biscayne aquifer wells), West (3 Biscayne Aquifer and 3 Upper Floridan aquifer storage reservoir [ASR] wells) and Southwest (16 Biscayne aquifer and 2 Upper Floridan aquifer ASR wells) wellfields. These wellfields are located more than 7 miles southwest of the site [1,21,22,24]. A breakdown of the community/noncommunity, municipal, County and private well systems, by distance, is presented in Table 1.

4.3 Ground-Water Conclusions

Elevated levels of heavy metals, in particular lead, may be present in percentage concentrations in site soils. If so, lead contamination to the surficial aquifer system is likely. The surficial aquifer system (Biscayne aquifer) is the primary source of drinking water in Dade County. A number of public drinking water wells are located in the site area. Based on these facts, the groundwater migration pathway is the primary pathway of concern at this site.

5.0. Surface Water Pathway

5.1 Hydrology

The site is located within the Urban Land Unit. The majority of the Urban Land Unit areas (85%) are covered by impervious man made structures including parking lots, shopping centers, buildings, streets and sidewalks. Soils in open areas, i.e. lawns, vacant lots and playgrounds, are generally classified as Undorthents. These soils has been altered by land grading activities and usually are covered with approximately 18 inches of stony, loamy fill material. The site area is relatively flat and is situated approximately 5 feet above mean sea level (msl) [1,23] (Figure 1). The FPLP site is located within a 100-year flood prone zone [1,25] (Figure 1). Stormwater runoff from the site is likely conveyed to the adjacent Miami Canal (Canal C-6) located near the southwest corner of the site. The Miami Canal turns into the Miami River downstream of the site. The Miami River and lower portions of the Miami Canal are both subject to tidal influence. A salinity control structure (S-26) is located upstream of the site near the 36th Street Bridge [18,26,31]. The Miami River discharges into Biscayne Bay approximately 5 miles downstream of the site. Biscayne Bay is connected to the Atlantic Ocean via the Government and Norris Cuts. These cuts are located approximately 3.6 miles east of the Miami River's outfall to the Bay [1,18,30].

5.2 Surface Water Targets

No drinking water intakes are located along the surface water migration pathway [1,21]. Recreational "cane pole" fishing likely occurs along lower stretches of the Miami Canal and the Miami River. Biscayne Bay is part of the Intracoastal waterway and is used for sportfishing and commercial fishing. An estimated 1,647,966 pounds of finfish, shellfish and shrimp were harvested from Dade County estuarine and coastal waters in 1990 [27]. Some of the species harvested from Biscayne Bay include: grouper, snapper, tarpon, snook and mullet. The Biscayne Bay Aquatic Preserve is habitat for a number of federally and/or state designated endangered/threatened species. Some of these species include: the Atlantic green turtle, Atlantic loggerhead turtle, Atlantic Leatherback turtle, Atlantic ridley turtle and the Florida grasshopper sparrow. Biscayne Bay and adjoining canals, rivers and lakes have been designated by the U.S. Fish and Wildlife Service as critical habitats for the endangered West Indian manatee [1,18,19,20,28,30]. Manatees have been reported in the Miami River [18,19,28].

5.3 Surface Water Pathway Conclusions

The Miami Canal is in close proximity to the site. Based on previous investigations of secondary lead smelting sites, percentage concentrations of lead may be present in site soils. Lead may be present in the waters and sediments of the Miami Canal via surface water runoff and groundwater discharge. Given the number of fisheries and sensitive environments present in the downstream water bodies (Miami River and Biscayne Bay), further evaluation of this pathway is warranted.

6.0 Soil Exposure and Air Migration Pathways

6.1 Physical Conditions

This site is now apparently used for shipping and cargo operations. However, for at least 25 years, secondary lead smelting took place at this site. As a result, lead concentrations in surface soils may exceed 1% near the former smelter location. Based on existing information, it is currently unclear how much of the site is covered by impervious surface. Access to the site is reportedly restricted by a fence [34,35,37,38,39,40,41].

6.2 Soil and Air Migration Targets

A small worker population likely exists on-site. However, no residential population or terrestrial sensitive environments are reported on-site [1,18,19,35]. The areas of Hialeah and Miami are heavily populated. The City of Miami has a population density of 10,357 people per square mile [6]. Based on 1990 Tiger Database Census data, there are 398,392 people living within 4 miles of the site [32]. A number of sensitive environments have been identified within 4 miles of the site. (Please refer to the Surface Water Targets Section (Section 5.2) for those sensitive environments.)

6.3 Soil Exposure and Air Pathway Conclusions

No residents or terrestrial sensitive environments exist on-site. Therefore, the soil exposure pathway is not a concern at this time. A large population and a number of sensitive environments exist within 4 miles of the site. However, no air releases have been reported to date. Therefore, the air migration pathway does not appear to be a major concern at this time.

7.0 Summary and Conclusions

The Former Pure Lead Products, Inc site (FPLP) site is located at 3450 NW North River Drive, Miami, Dade County, Florida. Based on a review of historical city directories, the FPLP facility started operations no later than 1944 and closed no earlier than 1969. Based on a recent FDEP windshield survey and Miami-Dade County Property Appraiser information, the Zila Shipping Cargo Service Company now occupies the FPLP site. The file information indicates that the FPLP operation consisted of a general

office and plant. FPLP reportedly conducted a secondary lead smelting operation, which produced sheet lead, solders, caulking lead, lead pipe and fishing sinkers. Site file information indicates that FPLP used batteries as a primary feedstock for lead. FPLP also reportedly bought scrap lead for processing.

The typical secondary smelting process involved lead scrap and lead components from used car batteries. The lead posts and grids were recovered from the batteries for smelting. The smelter operation typically consisted of reverberatory or blast furnaces, which were used to produce soft pure lead or specialty alloys. As part of the refining process, some smelting operations introduced antimony, arsenic and cadmium for the desired product. The furnaces were periodically opened to remove slag (60-70% lead) and a soft pure lead product. Studies at other former secondary lead smelting sites indicate that lead concentrations in surface soils may exceed 1% near the smelters. A study of soils at eight former secondary smelting facilities in Baltimore and Philadelphia indicated lead concentrations ranging from 306 mg/kg to 2,550 mg/kg. However, no groundwater or soil samples have been collected for analysis at the FPLP site. EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) have identified lead as the leading priority contaminant at Superfund sites. Both EPA and ATSDR consider lead a serious public health problem, particularly in children.

Elevated levels of heavy metals, in particular lead, may be present in percentage concentrations in site soils. If so, lead contamination to the surficial aquifer system is likely. The surficial aquifer system, which includes the Biscayne aquifer, is the primary source of drinking water in Dade County. A number of public drinking water wells (MDWSA Hialeah/Preston WTP wellfields) are located in the site area. Based on these facts, the groundwater migration pathway is the primary pathway of concern at this site.

The Miami Canal is in close proximity to the site. Based on previous investigations of secondary lead smelting sites, percentage concentrations of lead may be present in site soils. Therefore, lead may be present in the waters and sediments of the Miami Canal via surface water runoff and/or groundwater discharge. Given the number of fisheries and sensitive environments present in the downstream water bodies (Miami River and Biscayne Bay), further evaluation of this pathway is warranted.

No residents or terrestrial sensitive environments exist on-site. Therefore, the soil exposure pathway is not a concern at this time. A large population and a number of sensitive environments exist within 4 miles of the site. However, no air releases have been reported to date. Therefore, the air migration pathway does not appear to be a major concern at this time.

Based on past activities at this site, the likely presence of contaminated soil and groundwater and the proximity of the site to public drinking water wells, further CERCLA action is warranted at this site. Therefore a Site Inspection (SI) is recommended for this site.

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Former Pure Lead Products, Inc Preliminary Assessment

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Table 1

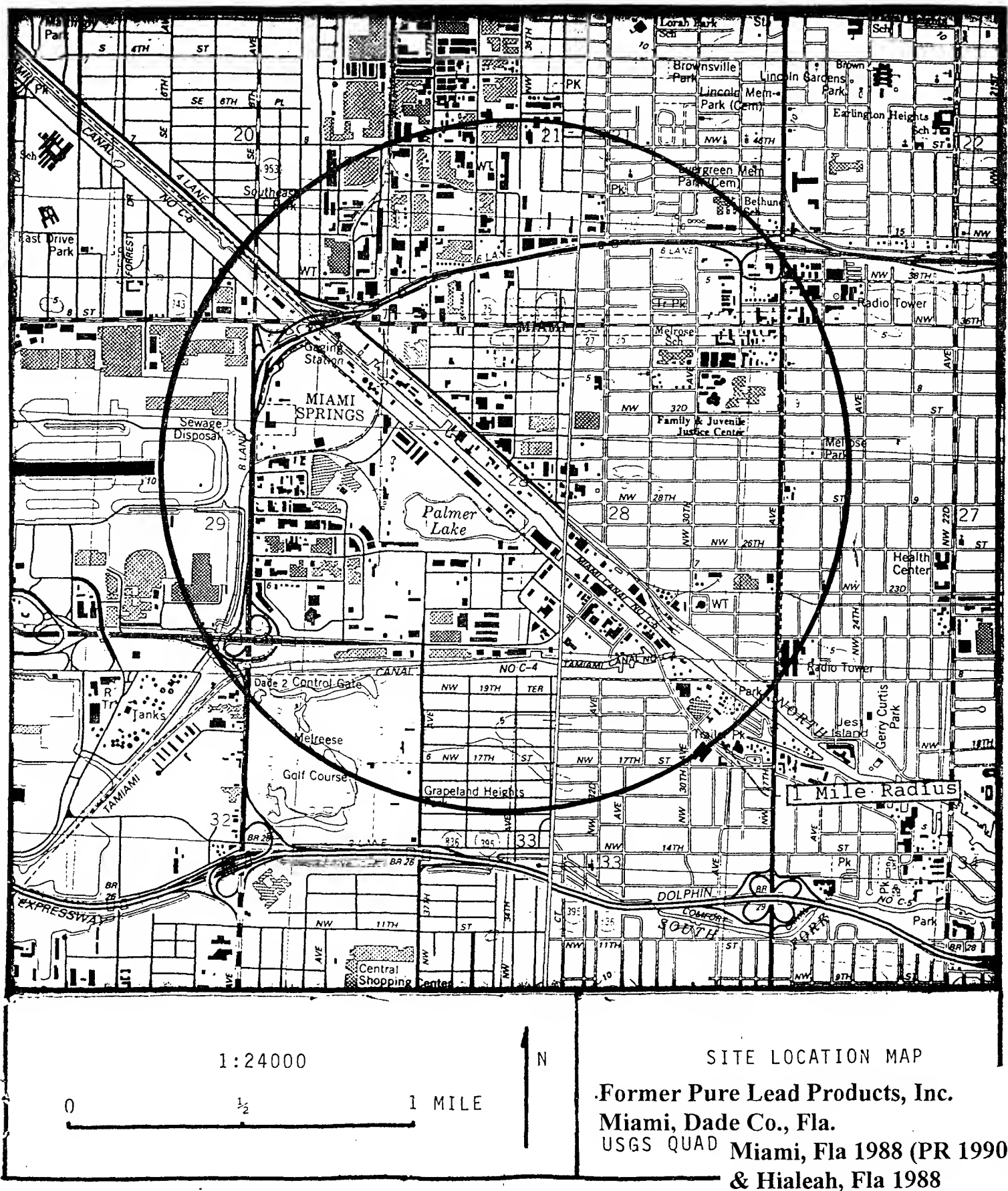
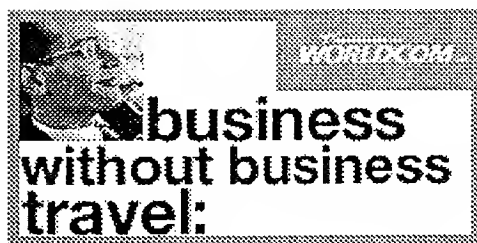


FIGURE 1


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FIGURE 2

...:twH0rag4a&SNVData=3mad3-5.fy%2808gu0z_%29r7ld0b%3bah7-%3darsu%2bL%14%2b%12/6/01

Table 1
Estimated Number of Potable Wells and Population Served
Former Pure Lead Products, Inc.
Miami, Dade County, Florida
Surficial Aquifer System (AOC)
Aka: Biscayne aquifer

Well Type	0-1/4 mile	1/4- 1/2 mile	1/2-1 mile	1-2 miles	2-3 miles	3-4 miles
Municipal	0/0	0/0	0/0	0/0	0/0	0/0
County ¹	0/0	0/0	0/0	0/0	18/545,454	10/303,030
Community/ Noncomm	0/0	0/0	0/0	0/0	0/0	0/0
Private	NE	NE	NE	NE	NE	NE
Totals	0/0	0/0	0/0	0/0	18/545,454	10/303,030

Key:

NE=Not Evaluated

AOC=Aquifer of Concern

Footnotes:

¹MDWSA-Main System. Water for this system is provided by wells open to the Biscayne aquifer. A number of upper Floridan aquifer storage reservoir (ASR) wells also exist. The Hialeah and Preston WTPs are provided raw water from the Northwest (15 wells), Hialeah/Preston (8 wells) and Miami Springs [Upper & Lower] (20 wells) wellfields. The Hialeah/Preston wellfield is situated between 2.7 and 3 miles northwest of the site. The Miami Springs-Upper wellfield is located between 2.9 and 3.9 miles northwest of the site while the Miami Springs-Lower wellfield is located between 2.3 and 2.8 miles west-northwest of the site. The Northwest Wellfield is located approximately 10.5 miles west of the site. The Alexander Orr, Jr. WTP is supplied raw water by the Alexander Orr (10 Biscayne aquifer wells), Snapper Creek (4 Biscayne aquifer wells), West (3 Biscayne Aquifer and 3 Upper Floridan aquifer/ASR wells) and Southwest (16 Biscayne aquifer and 2 Upper Floridan aquifer/ASR wells) wellfields. However, these wellfields are located more than 7 miles southwest of the site. Since both systems supply water to each other, the MDWSA main system was evaluated as a single combined system. There are 66 wells open to the Biscayne aquifer in the MDWSA main system. The Upper Floridan ASR wells were not included in the apportionment calculation. The two systems serve approximately 2,000,000 people. Therefore, 2,000,000 people/66 wells = 30,303 people per well [1,4,21,22,24].